

### Claims

1. A method for forming a ferrocapacitor comprising:  
     forming electrode elements over a substructure, the electrode elements  
     being in electrical contact with electrically conductive elements extending into  
     the substructure; and  
     depositing ferroelectric material between the electrode elements.
2. A method according to claim 1 in which the ferroelectric material is  
     formed as a layer covering the sides of the electrode elements, the method  
     further including a step of depositing support material over the ferroelectric  
     layer to fill gaps between the electrode elements.
3. A method according to claim 2 in which the layer of ferroelectric  
     material is formed by depositing ferroelectric material and then etching it to  
     reduce its thickness.
4. A method according to claim 2 in which the support material comprises  
     electrically conductive material at least at an interface between the support  
     material and the ferroelectric material.
5. A method according to claim 1 in which the electrode elements are  
     formed over an insulating layer containing openings, the electrodes contacting  
     the electrically conductive elements of the substructure through the openings.
6. A ferrocapacitor device formed by a method according to claim 1.
7. An FeRAM device including at least one ferrocapacitor formed by a  
     method according to claim 1.
8. An FeRAM device comprising electrode elements and ferroelectric  
     elements, the electrode elements and ferroelectric elements being formed

over a substructure, the electrodes being in electrical contact with electrically conductive elements extending into the substructure and the ferroelectric elements being arranged between the electrodes as layers formed on the lateral sides of the electrodes.